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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/802,285

DATE: 03/27/2001
TIME: 09:29:40

ENTERED

Input Set : A:\M06567063HCL.txt
Output Set: N:\CRF3\03272001\I802285.raw

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3 <110> APPLICANT: Liu, Dongfang
4     Pojasek, Kevin
5     Shriver, Zachary
6     Holley, Kristine
7     El-Shabrawi, Yosuf
8     Venkataraman, Ganesh
9     Sasisekharan, Ram
11 <120> TITLE OF INVENTION: Heparinase III and Uses Thereof
13 <130> FILE REFERENCE: M0656/7063HCL
C--> 15 <140> CURRENT APPLICATION NUMBER: US/09/802,285
C--> 16 <141> CURRENT FILING DATE: 2001-03-08
18 <160> NUMBER OF SEQ ID NOS: 3
20 <170> SOFTWARE: PatentIn version 3.0
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 1379
24 <212> TYPE: DNA
25 <213> ORGANISM: Pedobacter heparinus
27 <400> SEQUENCE: 1
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30 cagcaattca tccgctttca accaaagtga aagcatttaa tacaatacca gaatgtcgca      120
32 tttccctttc agcgactttt ttgggtaaat aaccaataaa aactaaagac ggatgaaaaa      180
34 acaaattcta tatctgattg tacttcagca actgttccctc tgttcggctt acgcccagca      240
36 aaaaaaatcc ggtaacatcc cttaccgggt aaatgtgcag gccgacagtg ctaagcagaa      300
38 ggcgattatt gacaacaaat ggggtggcag aggcacatcaat aaaccttatg cattacaata      360
40 tgacgataaa ctgcgcttta atggaaaacc atcctatcgc tttagctta aagccgaaga      420
42 caattcgctt gaaggttatg ctgcaggaga aacaaagggc cgtacagaat tgcgtacag      480
44 ctatgcaacc accaatgatt ttaagaaatt tccccaaagc gtataccaaa atgcgcaaaa      540
46 gctaaaaacc gtttatcatt acggcaaaag gatttgtgaa caggggagct cccgcagcta      600
48 taccttttca gtgtacatac cctcctcctt ccccgacaat gcgactacta tttttgcccc      660
50 atggcatggt gcaccagca gaacgcttgt agctacacca gagggagaaa ttaaaacact      720
52 gagcatagaa gagtttttgg ccttatacga ccgcgatgatc ttcaaaaaaa atatcgcccc      780
54 tgataaagtt gaaaaaaaag ataaggacgg aaaaattact tatgtagccg gaaagccaaa      840
56 tggctggaag gtagaacaag gtggttatcc cacgctggcc tttggttttt ctaaagggta      900
58 tttttacatc aaggcaaaact ccgaccggca gtggcttacc gacaaagccg accgtaacaa      960
60 tgccaatccc gagaatagtg aagtaatgaa gccctattcc tcggaatata aaacttcaac      1020
62 cattgcctat aaaaatgcct ttgcccagtt ccctaaagat tgctggatta cttttgatgt      1080
64 cgccatagac tggacgaaat atggaaaaga ggccaataca attttgaaac ccggttaagct      1140
66 ggatgtgatg atgacttata ccaagaataa gaaaccacaa aaagcgcata tcgtaaacca      1200
68 gcaggaaatc ctgacgggac gtaacgatga cgatggctat tacttcaaat ttggaattta      1260
70 cagggtcggt aacagcacgg tcccggttac ttataacctg agcgggtaca gcgaaactgc      1320
72 cagatagcaa aagccctaag cgcacccgat agggcttttc ttatatattac aataaaaatt      1379
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76 <211> LENGTH: 384
77 <212> TYPE: PRT
78 <213> ORGANISM: Pedobacter heparinus
80 <400> SEQUENCE: 2
82 Met Lys Lys Gln Ile Leu Tyr Leu Ile Val Leu Gln Gln Leu Phe Leu

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83 1          5          10          15
85 Cys Ser Ala Tyr Ala Gln Gln Lys Lys Ser Gly Asn Ile Pro Tyr Arg
86          20          25          30
88 Val Asn Val Gln Ala Asp Ser Ala Lys Gln Lys Ala Ile Ile Asp Asn
89          35          40          45
91 Lys Trp Val Ala Val Gly Ile Asn Lys Pro Tyr Ala Leu Gln Tyr Asp
92          50          55          60
94 Asp Lys Leu Arg Phe Asn Gly Lys Pro Ser Tyr Arg Phe Glu Leu Lys
95 65          70          75          80
97 Ala Glu Asp Asn Ser Leu Glu Gly Tyr Ala Ala Gly Glu Thr Lys Gly
98          85          90          95
100 Arg Thr Glu Leu Ser Tyr Ser Tyr Ala Thr Thr Asn Asp Phe Lys Lys
101          100          105          110
103 Phe Pro Pro Ser Val Tyr Gln Asn Ala Gln Lys Leu Lys Thr Val Tyr
104          115          120          125
106 His Tyr Gly Lys Gly Ile Cys Glu Gln Gly Ser Ser Arg Ser Tyr Thr
107          130          135          140
109 Phe Ser Val Tyr Ile Pro Ser Ser Phe Pro Asp Asn Ala Thr Thr Ile
110 145          150          155          160
112 Phe Ala Gln Trp His Gly Ala Pro Ser Arg Thr Leu Val Ala Thr Pro
113          165          170          175
115 Glu Gly Glu Ile Lys Thr Leu Ser Ile Glu Glu Phe Leu Ala Leu Tyr
116          180          185          190
118 Asp Arg Met Ile Phe Lys Lys Asn Ile Ala His Asp Lys Val Glu Lys
119          195          200          205
121 Lys Asp Lys Asp Gly Lys Ile Thr Tyr Val Ala Gly Lys Pro Asn Gly
122          210          215          220
124 Trp Lys Val Glu Gln Gly Tyr Pro Thr Leu Ala Phe Gly Phe Ser
125 225          230          235          240
127 Lys Gly Tyr Phe Tyr Ile Lys Ala Asn Ser Asp Arg Gln Trp Leu Thr
128          245          250          255
130 Asp Lys Ala Asp Arg Asn Asn Ala Asn Pro Glu Asn Ser Glu Val Met
131          260          265          270
133 Lys Pro Tyr Ser Ser Glu Tyr Lys Thr Ser Thr Ile Ala Tyr Lys Met
134          275          280          285
136 Pro Phe Ala Gln Phe Pro Lys Asp Cys Trp Ile Thr Phe Asp Val Ala
137          290          295          300
139 Ile Asp Trp Thr Lys Tyr Gly Lys Glu Ala Asn Thr Ile Leu Lys Pro
140 305          310          315          320
142 Gly Lys Leu Asp Val Met Met Thr Tyr Thr Lys Asn Lys Lys Pro Gln
143          325          330          335
145 Lys Ala His Ile Val Asn Gln Gln Glu Ile Leu Ile Gly Arg Asn Asp
146          340          345          350
148 Asp Asp Gly Tyr Tyr Phe Lys Phe Gly Ile Tyr Arg Val Gly Asn Ser
149          355          360          365
151 Thr Val Pro Val Thr Tyr Asn Leu Ser Gly Tyr Ser Glu Thr Ala Arg
152          370          375          380
154 <210> SEQ ID NO: 3
155 <211> LENGTH: 25

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Input Set : A:\M06567063HCL.txt
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156 <212> TYPE: PRT
157 <213> ORGANISM: Flavobacterium heparinum
159 <400> SEQUENCE: 3
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162 1 5 10 15
164 Val Ala Ala Ile Asp Ile Phe Leu Lys
165 20 25

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/802,285

DATE: 03/27/2001

TIME: 09:29:41

Input Set : A:\M06567063HCL.txt

Output Set: N:\CRF3\03272001\I802285.raw

L:15 M:270 C: Current Application Number differs, Replaced Current Application Number
L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date